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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,743	11/09/2006	Roberto A. Macina	DEX-0552	4777

32800 7590 09/24/2008
LICATA & TYRRELL P.C.
66 E. MAIN STREET
MARLTON, NJ 08053

EXAMINER

MARTINELL, JAMES

ART UNIT	PAPER NUMBER
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1634

NOTIFICATION DATE	DELIVERY MODE
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09/24/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

poreilly@licataandtyrrell.com

Office Action Summary	Application No. 10/537,743	Applicant(s) MACINA ET AL.	
	Examiner James Martinell	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/6/05 & 12/3/07</u> . | 6) <input type="checkbox"/> Other: _____ |

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Applicant's election with traverse of the requirement for restriction in the reply filed on August 19, 2008 is acknowledged. The traversal is on the ground(s) that a search of the art relating to an elected nucleic acid should reveal art relating to all claims. This is not found persuasive because the searches of the three Groups of inventions are not co-extensive. It is noted that applicants did not argue against the selection of a single sequence for examination on the merits.

The requirement is still deemed proper and is therefore made FINAL.

Claims 11-14, 15 (insofar as it is drawn to polypeptide assays) and 16-18 (insofar as they are drawn to kits containing polypeptides (claim 16), methods of treatment using polypeptides (claim 17), and polypeptide vaccines (claim 18)) are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 19, 2008.

No copy of WO 042393, cited in the Information Disclosure Statement filed December 3, 2007, is in the file. However, since the reference was readily available to the USPTO, it has been considered.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite.

- (a) Claims 1-10 and 15-18 are vague and indefinite because they claim more than was elected. Claims 1, 15, 16, and 17 are drawn to or require the use of more than one selected nucleic acid sequence. Claims 15, 16, and 18 are

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drawn to non-elected methods of using polypeptides, Kits containing polypeptides, and polypeptide vaccines.

- (b) Claims 1, 15, and 17 are vague and indefinite because one cannot know any particular percent sequence identity to a nucleic acid that encodes a given polypeptide sequence because of the degeneracy of the genetic code.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Because one cannot know any particular percent sequence identity to a nucleic acid that encodes a given polypeptide sequence because of the degeneracy of the genetic code, the claims lack an adequate written description in that not enough structure is recited such that one of skill in the art would consider applicants to be in possession of the claimed invention as of the effective filing date of the claims.

In *Vas-Cath v Mahurkar*, 19 USPQ2d 1111 (Fed. Cir. 1991) the court stated, "applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed*" (emphasis in the original) (*Vas-Cath* at page 1117). The instant application does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is now claimed" (*Vas-Cath* at page 1116). In *Fiers v. Sugano*, 25 USPQ2d 1601 (Fed. Cir. 1993), the court also held that, "An adequate written description of a DNA requires more than a mere statement that it is part of the invention and reference a potential method for isolating it; what is required is a description of the DNA itself" (*Fiers v. Sugano*, page 1606). This view was reiterated in *Fiddes v. Baird*, USPQ2d 1481 (BPAI 1993) at page 1483, "If a conception of a DNA requires a specific definition, such as by structure, formula, chemical name, or physical properties, as we have held, then a description also requires that degree of specificity. . . . one cannot describe what one has not conceived." The court amplified this

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notion with respect to inventions claiming genetic material in *Regents of the University of California v. Eli Lilly*, 43 USPQ2d 1398 (Fed. Cir. 1997), stating at page 1406,

"In claims to genetic material, however, a generic statement such as 'vertebrate insulin cDNA' or 'mammalian insulin cDNA,' without more, is not an adequate written description of the genus because it does not distinguish the claimed genus from others, except by function. It does not specifically define any of the genes that fall within its definition. It does not define any structural features commonly possessed by members of the genus that distinguish them from others. One skilled in the art therefore cannot, as one can do with a fully described genus, visualize or recognize the identity of the members of the genus. . . . Accordingly, naming a type of material generally known to exist, in the absence of knowledge as to what that material consists of, is not a description of that material."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Mitcham et al (WO 00/36107 (June 23, 2000)). Mitcham et al discloses a nucleic acid (SEQ ID NO: 391) that hybridizes to SEQ ID NO: 109 of the instant application (see the alignment below). Mitcham et al also teaches the use of the nucleic acid as a marker for ovarian cancer, treatment of ovarian cancer, and kits for the detection of ovarian cancer (*e.g.*, see the Abstract, page 28, line 15 through page 29, line 20, page 37, lines 11-23, page 42, line 25 through page 44, line 9, page 45, lines 3-10, and page 46, line 1 through page 51, line 20). SEQ ID NO: 109 has basis in Serial No. 60/484,584 (sequence bridging pages 154-155) and thus the effective filing date of the instant claims is June 30, 2003.

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ALIGNMENT OF SEQ ID NO: 109 AND MITCHAM ET AL (WO 00/35107, SEQ ID NO: 391)

RESULT 2

AAA70077

ID AAA70077 standard; cDNA; 2627 BP.

XX

AC AAA70077;

XX

DT 07-NOV-2000 (first entry)

XX

DE Human ovarian carcinoma antigen polynucleotide SEQ ID NO:391.

XX

KW Human; ovarian carcinoma; ovarian cancer; therapy; diagnosis;

KW tumour antigen; identification; cytostatic; gene therapy; vaccine; ss.

XX

OS Homo sapiens.

XX

PN WO200036107-A2.

XX

PD 22-JUN-2000.

XX

PF 17-DEC-1999; 99WO-US030270.

XX

PR 17-DEC-1998; 98US-00215681.

PR 17-DEC-1998; 98US-00216003.

PR 23-JUN-1999; 99US-00338933.

PR 24-SEP-1999; 99US-00404879.

XX

PA (CORI-) CORIXA CORP.

XX

PI Mitcham JL, King GE, Algate PA, Frudakis TN;

XX

DR WPI; 2000-431589/37.

XX

PT Immunogenic portion of an ovarian carcinoma protein and the nucleic acid

PT encoding it, useful for the diagnosis, prevention and treatment of

PT cancer, preferably ovarian cancer.

XX

PS Claim 1; Page 204-205; 299pp; English.

XX

CC The present invention describes an isolated polypeptide comprising an

CC immunogenic portion of an ovarian carcinoma protein (or its variants).

CC Ovarian carcinoma proteins, and polynucleotides encoding them, have

CC cytostatic activity and can be used in gene therapy and vaccines. Ovarian

CC carcinoma polypeptides, nucleic acids, antibodies and vaccines are useful

CC for the prevention, diagnosis and treatment of cancer, preferably ovarian

CC cancer. AAA69691 to AAA70077 and AAB12552 to AAB12557 represent human

CC ovarian carcinoma polynucleotides and proteins used in the

CC exemplification of the present invention

XX

SQ Sequence 2627 BP; 754 A; 605 C; 584 G; 684 T; 0 U; 0 Other;

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Query Match 90.5%; Score 2434; DB 3; Length 2627;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2434; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	257	CAGGGAGACACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATG	316
Db	177	CAGGGAGACACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATG	236
Qy	317	GAATCCTGAGCTGCACCTTTTGAACCTGACATCAAACCTTTCTGATATCGTGATACAATGGC	376
Db	237	GAATCCTGAGCTGCACCTTTTGAACCTGACATCAAACCTTTCTGATATCGTGATACAATGGC	296
Qy	377	TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCCG	436
Db	297	TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCCG	356
Qy	437	AGCAGGATGAAATGTTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA	496
Db	357	AGCAGGATGAAATGTTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA	416
Qy	497	ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA	556
Db	417	ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA	476
Qy	557	TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAACTGGAGCCTTCAGCA	616
Db	477	TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAACTGGAGCCTTCAGCA	536
Qy	617	TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC	676
Db	537	TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC	596
Qy	677	GATGGTTCCCCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACTTCT	736
Db	597	GATGGTTCCCCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACTTCT	656
Qy	737	CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT	796
Db	657	CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT	716
Qy	797	CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG	856
Db	717	CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG	776
Qy	857	CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAGGCGGAGTCACCTAC	916
Db	777	CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAGGCGGAGTCACCTAC	836
Qy	917	AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTTCTTTCTTTGCCATCAGCTGGGCAC	976
Db	837	AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTTCTTTCTTTGCCATCAGCTGGGCAC	896
Qy	977	TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG	1036
Db	897	TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG	956
Qy	1037	CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTACCACCAGATATGACCTAGTT	1096
Db	957	CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTACCACCAGATATGACCTAGTT	1016

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Qy	1097	TTATATTTCTGGGAGGAAATGAATTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA	1156
Db	1017	TTATATTTCTGGGAGGAAATGAATTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA	1076
Qy	1157	AGAAACAAAAAGAAGCCAAAAGCAGAAGGCTCCAATATGAACAAGATAAATCTATCTTCA	1216
Db	1077	AGAAACAAAAAGAAGCCAAAAGCAGAAGGCTCCAATATGAACAAGATAAATCTATCTTCA	1136
Qy	1217	AAGACATATTAGAAGTTGGGAAAATAATTCATGTGAACTAGACAAGTGTGTTAAGAGTGA	1276
Db	1137	AAGACATATTAGAAGTTGGGAAAATAATTCATGTGAACTAGACAAGTGTGTTAAGAGTGA	1196
Qy	1277	TAAGTAAAATGCACGTGGAGACAAGTGCATCCCAGATCTCAGGGACCTCCCCCTGCCTG	1336
Db	1197	TAAGTAAAATGCACGTGGAGACAAGTGCATCCCAGATCTCAGGGACCTCCCCCTGCCTG	1256
Qy	1337	TCACCTGGGGAGTGAGAGGACAGGATAGTGCATGTTCTTTGTCTCTGAATTTTATGTTAT	1396
Db	1257	TCACCTGGGGAGTGAGAGGACAGGATAGTGCATGTTCTTTGTCTCTGAATTTTATGTTAT	1316
Qy	1397	ATGTGCTGTAATGTTGCTCTGAGGAAGCCCCTGAAAGTCTATCCCAACATATCCACATC	1456
Db	1317	ATGTGCTGTAATGTTGCTCTGAGGAAGCCCCTGAAAGTCTATCCCAACATATCCACATC	1376
Qy	1457	TTATATTCCACAAATTAAGCTGTAGTATGTACCCTAAGACGCTGCTAATTGACTGCCACT	1516
Db	1377	TTATATTCCACAAATTAAGCTGTAGTATGTACCCTAAGACGCTGCTAATTGACTGCCACT	1436
Qy	1517	TCGCAACTCAGGGGCGGCTGCATTTTAGTAATGGGTCAAATGATTCACTTTTATGATGC	1576
Db	1437	TCGCAACTCAGGGGCGGCTGCATTTTAGTAATGGGTCAAATGATTCACTTTTATGATGC	1496
Qy	1577	TTCCAAAGGTGCCTTGGCTTCTCTTCCCACTGACAAATGCCAAAGTTGAGAAAAATGAT	1636
Db	1497	TTCCAAAGGTGCCTTGGCTTCTCTTCCCACTGACAAATGCCAAAGTTGAGAAAAATGAT	1556
Qy	1637	CATAATTTTAGCATAAACAGAGCAGTCGGCGACACCGATTTTATAAATAAACTGAGCACC	1696
Db	1557	CATAATTTTAGCATAAACAGAGCAGTCGGCGACACCGATTTTATAAATAAACTGAGCACC	1616
Qy	1697	TTCTTTTTAAACAAACAAATGCGGGTTTATTTCTCAGATGATGTTTCATCCGTGAATGGTC	1756
Db	1617	TTCTTTTTAAACAAACAAATGCGGGTTTATTTCTCAGATGATGTTTCATCCGTGAATGGTC	1676
Qy	1757	CAGGGAAGGACCTTTCACCTTGACTATATGGCATTATGTCATCACAAGCTCTGAGGCTTC	1816
Db	1677	CAGGGAAGGACCTTTCACCTTGACTATATGGCATTATGTCATCACAAGCTCTGAGGCTTC	1736
Qy	1817	TCCTTTCCATCCTGCGTGGACAGCTAAGACCTCAGTTTTCAATAGCATCTAGAGCAGTGG	1876
Db	1737	TCCTTTCCATCCTGCGTGGACAGCTAAGACCTCAGTTTTCAATAGCATCTAGAGCAGTGG	1796
Qy	1877	GACTCAGCTGGGGTGATTTGCCCCCATCTCCGGGGGAATGTCTGAAGACAATTTTGGT	1936
Db	1797	GACTCAGCTGGGGTGATTTGCCCCCATCTCCGGGGGAATGTCTGAAGACAATTTTGGT	1856
Qy	1937	TACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACTACCAACTAGTGGATAAAGGCCA	1996
Db	1857	TACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACTACCAACTAGTGGATAAAGGCCA	1916

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Qy	1997	GGGATGCTGCTCAACCTCCTACCATGTACAGGACGTCTCCCCATTACAACCTACCCAATCC	2056
Db	1917	GGGATGCTGCTCAACCTCCTACCATGTACAGGACGTCTCCCCATTACAACCTACCCAATCC	1976
Qy	2057	GAAGTGTCAACTGTGTCTCAGGACTAAGAAACCCTGGTTTTGAGTAGAAAAGGGCCTGGAAA	2116
Db	1977	GAAGTGTCAACTGTGTCTCAGGACTAAGAAACCCTGGTTTTGAGTAGAAAAGGGCCTGGAAA	2036
Qy	2117	GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG	2176
Db	2037	GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG	2096
Qy	2177	TCTCTTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTATCGGGCACCAGGATAACAT	2236
Db	2097	TCTCTTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTATCGGGCACCAGGATAACAT	2156
Qy	2237	CTCTCAGTGAACAGAGTTGACAAGGCCATATGGGAAATGCCTGATGGGATTATCTTCAGCT	2296
Db	2157	CTCTCAGTGAACAGAGTTGACAAGGCCATATGGGAAATGCCTGATGGGATTATCTTCAGCT	2216
Qy	2297	TGTTGAGCTTCTAAGTTTCTTTCCCTTCATTCTACCTGCAAGCCAAGTTCTGTAAGAGA	2356
Db	2217	TGTTGAGCTTCTAAGTTTCTTTCCCTTCATTCTACCTGCAAGCCAAGTTCTGTAAGAGA	2276
Qy	2357	AATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATCTCCAGACCCTTCCTG	2416
Db	2277	AATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATCTCCAGACCCTTCCTG	2336
Qy	2417	GCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCACACACAGACTTTTG	2476
Db	2337	GCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCACACACAGACTTTTG	2396
Qy	2477	AAAGCAAGGACAATGACTGCTTGAATTGAGGCCTTGAGGAATGAAGCTTTGAAGGAAAAG	2536
Db	2397	AAAGCAAGGACAATGACTGCTTGAATTGAGGCCTTGAGGAATGAAGCTTTGAAGGAAAAG	2456
Qy	2537	AATACTTTGTTTCCAGCCCCCTTCCCACACTCTTCATGTGTTAACCACTGCCTTCCTGGA	2596
Db	2457	AATACTTTGTTTCCAGCCCCCTTCCCACACTCTTCATGTGTTAACCACTGCCTTCCTGGA	2516
Qy	2597	CCTTGAGCCACGGTGACTGTATTACATGTTGTTATAGAAAAGTATTTAGAGTTCTGA	2656
Db	2517	CCTTGAGCCACGGTGACTGTATTACATGTTGTTATAGAAAAGTATTTAGAGTTCTGA	2576
Qy	2657	TCGTTCAAGAGAATGATTAAATATACATTTCTTA	2690
Db	2577	TCGTTCAAGAGAATGATTAAATATACATTTCTTA	2610

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Claims 1-10 and 15-18 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Mitcham et al (U.S. Patent No. 6,468,546). Mitcham et al discloses a nucleic acid (SEQ ID NO: 391) that hybridizes to SEQ ID NO: 109 of the instant application (see the alignment below). Mitcham et al also teaches the use of the nucleic acid as a marker for ovarian cancer, treatment of ovarian cancer, and kits for the detection of ovarian cancer (*e.g.*, see the Abstract, column 8, lines 26-40, column 18, line 34 through column 19, line 51, column 24, lines 36-51, column 28, line 4 through column 29, line 45, and column 30, line 21 through column 33, line 5).

ALIGNMENT OF SEQ ID NO: 109 AND MITCHAM ET AL (U.S. Patent No. 6,468,546, SEQ ID NO: 391)

RESULT 1

US-09-404-879A-391

; Sequence 391, Application US/09404879A

; Patent No. 6468546

; GENERAL INFORMATION:

; APPLICANT: Mitcham, Jennifer L.

; APPLICANT: King, Gordon E.

; APPLICANT: Algate, Paul A.

; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND

; TITLE OF INVENTION: DIAGNOSIS OF OVARIAN CANCER

; FILE REFERENCE: 210121.462C2

; CURRENT APPLICATION NUMBER: US/09/404,879A

; CURRENT FILING DATE: 1999-09-24

; NUMBER OF SEQ ID NOS: 393

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 391

; LENGTH: 2627

; TYPE: DNA

; ORGANISM: Homo sapiens

US-09-404-879A-391

Query Match 90.5%; Score 2434; DB 3; Length 2627;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2434; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      257 CAGGGAGACACTCCATCACAGTCACTACTGTGCGCTCAGCTGGGAACATTGGGGAGGATG 316
          |||
Db      177 CAGGGAGACACTCCATCACAGTCACTACTGTGCGCTCAGCTGGGAACATTGGGGAGGATG 236

Qy      317 GAATCCTGAGCTGCACCTTTGAACCTGACATCAAACCTTCTGATATCGTGATACAATGGC 376
          |||
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Db	237	GAATCCTGAGCTGCACTTTTGAACCTGACATCAAACCTTCTGATATCGTGATACAATGGC	296
Qy	377	TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCCG	436
Db	297	TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCCG	356
Qy	437	AGCAGGATGAAATGTTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA	496
Db	357	AGCAGGATGAAATGTTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA	416
Qy	497	ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA	556
Db	417	ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA	476
Qy	557	TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAACTGGAGCCTTCAGCA	616
Db	477	TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAACTGGAGCCTTCAGCA	536
Qy	617	TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC	676
Db	537	TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC	596
Qy	677	GATGGTTCCCCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACCTTCT	736
Db	597	GATGGTTCCCCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACCTTCT	656
Qy	737	CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT	796
Db	657	CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT	716
Qy	797	CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG	856
Db	717	CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG	776
Qy	857	CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAAGGCGGAGTCACCTAC	916
Db	777	CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAAGGCGGAGTCACCTAC	836
Qy	917	AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTCTTCTTTTGGCCATCAGCTGGGCAC	976
Db	837	AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTCTTCTTTTGGCCATCAGCTGGGCAC	896
Qy	977	TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG	1036
Db	897	TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG	956
Qy	1037	CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTACCACCAGATATGACCTAGTT	1096
Db	957	CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTACCACCAGATATGACCTAGTT	1016
Qy	1097	TTATATTTCTGGGAGGAAATGAATTTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA	1156
Db	1017	TTATATTTCTGGGAGGAAATGAATTTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA	1076
Qy	1157	AGAAACAAAAAGAAGCCAAAAGCAGAAGGCTCCAATATGAACAAGATAAATCTATCTTCA	1216
Db	1077	AGAAACAAAAAGAAGCCAAAAGCAGAAGGCTCCAATATGAACAAGATAAATCTATCTTCA	1136

Qy	1217	AAGACATATTAGAAGTTGGGAAAATAATTCATGTGAACTAGACAAGTGTGTTAAGAGTGA	1276
Db	1137		
Qy	1277	TAAGTAAATGCACGTGGAGACAAGTGCATCCCCAGATCTCAGGGACCTCCCCCTGCCTG	1336
Db	1197		
Qy	1337	TCACCTGGGGAGTGAGAGGACAGGATAGTGCATGTTCTTTGTCTCTGAATTTTTAGTTAT	1396
Db	1257		
Qy	1397	ATGTGCTGTAATGTTGCTCTGAGGAAGCCCCTGGAAAGTCTATCCCAACATATCCACATC	1456
Db	1317		
Qy	1457	TTATATTCCACAAATTAAGCTGTAGTATGTACCCTAAGACGCTGCTAATTGACTGCCACT	1516
Db	1377		
Qy	1517	TCGCAACTCAGGGGCGGCTGCATTTTAGTAATGGGTCAAATGATTCACTTTTTATGATGC	1576
Db	1437		
Qy	1577	TTCCAAAGGTGCCTTGGCTTCTCTTCCCAACTGACAAATGCCAAAGTTGAGAAAAATGAT	1636
Db	1497		
Qy	1637	CATAATTTTAGCATAAACAGAGCAGTCGGCGACACCGATTTTATAAATAAACTGAGCACC	1696
Db	1557		
Qy	1697	TTCTTTTTTAAACAAACAAATGCGGGTTTATTTCTCAGATGATGTTTCATCCGTGAATGGTC	1756
Db	1617		
Qy	1757	CAGGGAAGGACCTTTCACCTTGACTATATGGCATTATGTCATCACAAGCTCTGAGGCTTC	1816
Db	1677		
Qy	1817	TCCTTTCCATCCTGCGTGGACAGCTAAGACCTCAGTTTTCAATAGCATCTAGAGCAGTGG	1876
Db	1737		
Qy	1877	GACTCAGCTGGGGTGATTTGCGCCCCCATCTCCGGGGGAATGTCTGAAGACAATTTTGGT	1936
Db	1797		
Qy	1937	TACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACTACCAACTAGTGGATAAAGGCCA	1996
Db	1857		
Qy	1997	GGGATGCTGCTCAACCTCCTACCATGTACAGGACGTCTCCCCATTACAACCTACCCAATCC	2056
Db	1917		
Qy	2057	GAAGTGTCAACTGTGTGTCAGGACTAAGAAACCTGGTTTTGAGTAGAAAAGGGCCTGGAAA	2116
Db	1977		
Qy	2117	GAAGTGTCAACTGTGTGTCAGGACTAAGAAACCTGGTTTTGAGTAGAAAAGGGCCTGGAAA	2176
Db	1937		

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Qy	2117	GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG	2176
Db	2037	GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG	2096
Qy	2177	TCTCTTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTATCGGGCACCAGGATAACAT	2236
Db	2097	TCTCTTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTATCGGGCACCAGGATAACAT	2156
Qy	2237	CTCTCAGTGAACAGAGTTGACAAGGCCTATGGGAAATGCCTGATGGGATTATCTTCAGCT	2296
Db	2157	CTCTCAGTGAACAGAGTTGACAAGGCCTATGGGAAATGCCTGATGGGATTATCTTCAGCT	2216
Qy	2297	TGTTGAGCTTCTAAGTTTCTTTCCCTTCATTCTACCTGCAAGCCAAGTTCTGTAAGAGA	2356
Db	2217	TGTTGAGCTTCTAAGTTTCTTTCCCTTCATTCTACCTGCAAGCCAAGTTCTGTAAGAGA	2276
Qy	2357	AATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATCTCCAGACCCTTCCTG	2416
Db	2277	AATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATCTCCAGACCCTTCCTG	2336
Qy	2417	GCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCACACAGACTTTTG	2476
Db	2337	GCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCACACAGACTTTTG	2396
Qy	2477	AAAGCAAGGACAATGACTGCTTGAATTGAGGCCTTGAGGAATGAAGCTTTGAAGGAAAAG	2536
Db	2397	AAAGCAAGGACAATGACTGCTTGAATTGAGGCCTTGAGGAATGAAGCTTTGAAGGAAAAG	2456
Qy	2537	AATACTTTGTTTCCAGCCCCCTTCCCACTCTTCATGTGTTAACCACTGCCTTCCTGGA	2596
Db	2457	AATACTTTGTTTCCAGCCCCCTTCCCACTCTTCATGTGTTAACCACTGCCTTCCTGGA	2516
Qy	2597	CCTTGAGCCACGGTGACTGTATTACATGTTGTTATAGAAAAGTATTTAGAGTTCTGA	2656
Db	2517	CCTTGAGCCACGGTGACTGTATTACATGTTGTTATAGAAAAGTATTTAGAGTTCTGA	2576
Qy	2657	TCGTTCAAGAGAATGATTAAATATACATTTCTTA	2690
Db	2577	TCGTTCAAGAGAATGATTAAATATACATTTCTTA	2610

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (571) 272-0719.

The examiner works a flexible schedule and can be reached by phone and voice mail.

Alternatively, a request for a return telephone call may be e-mailed to james.martinell@uspto.gov. Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571) 272-0735.

OFFICIAL FAX NUMBER

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/James Martinell/
Primary Examiner
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